Robert Pitman - NMFS - Member of Pacific Sea Turtle Recovery Team Personal Communication March 19, 2002 858-546-7092

Two classes of turtles

Leatherbacks - deep water
Face more serious problems than exposure to pollutants
Hardshells - Very rare in WA

Problems facing these species are severe
Fishing by-catch
People disturbing nests,
Taking adults for food

These problems dwarf environmental problems

Peter Dutton - NMFS -Personal Communication March 19, 2002 858-546-5636

More interest in doing research on sea turtles and chemical pollutants Information is just not there

No baseline for pollutants either

Don't know the role pollutants play, but it could be significant

Despite conservation, numbers still dropping

Besides human killing of sea turtles, effects [of chemical pollutants] could be significant

There is concern, but just no information

Kathy Moore - National Ocean Service (NOS), Charleston 843-762-8514 called LM

Therri Work - USGS Hawaii 808-541-3445

Pat Fair - NOS 843-762-8533 called LM

Logica July 15,2002 - Tom Longhlin -- dogs, bears, - con be surrogate - ase same precontins we und we for other manuals - no concern about pollulary ble no evidence - heavy metals & aganochlorines - no little between chemical governos are aprolina that and - this pp. June 8C+ place + they are increasing no animals from verser short - 70 - not a course of decline, but may be a course of concern

potential Burd Digne east 1994 1200 6th Ave, MS: ECL-112 Seattle, WA 98101 206.553.6316 Mountmon MANNIN MONNO as patential look mas TSI VIDE DIDTILL DUID-5288-098 could Give Allehuer Zunt our sure on June +011 -- I pale dolumen - Science Conter-

SEA TURTLES

Contacted:

Peter Dutton - NMFS -Personal Communication March 19, 2002 858-546-5636 See below for notes

Robert Pitman - NMFS - Member of Pacific Sea Turtle Recovery Team Personal Communication March 19, 2002 858-546-7092 See below for notes

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Pat Fair - NOS 843-762-8533 called LM

SEA LIONS

Contacted:

Tom Loughlin - NMFS 206-526-4040 tom.loughlin@noaa.gov See below for notes

WHALES

Contacted:

Lyndal Johnson - Science Center 206-860-3345 See below for notes

Gina Ylitalo - Science Center 206-860-3325 See below for notes

John Calimbokitis - Cascadia Research 360-943-7325 See below for notes

Peggy Krahn - Science Center

called but unable to help

Tried to contact:

George Dixon - University of Waterloo, Ontario 519-888-4567 ext. 2531 dgdixon@sciborg.uwaterloo.ca e-mailed, no reply

Robert Pitman - NMFS - Member of Pacific Sea Turtle Recovery Team Personal Communication March 19, 2002 858-546-7092

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Tom Loughlin - NMFS Personal Communication July 15, 2002 206-526-4040

If no info, use other mammals as surrogates - dogs, bears, etc. - and use same precautions we would use for other mammals (marine and terrestrial)

No concern about pollutants because no evidence

Heavy metals and organochlorines most studies

No link between chemical and effects in species

Some say pollutants are an extra straw that will weaken these species - he doesn't agree

The population of sea lions in this area [off coast of Washington/Puget Sound/Straits of Georgia] is increasing

Not a cause of decline, but may be a cause of concern

Lyndal Johnson - Science Center Personal Communication July 15, 2002 206-860-3345

Not sure about issue Gave contact - Gina Ylitalo

Gina Ylitalo - Science Center Personal Communication July 15, 2002 206-860-3325

Discussed CRC Handbook of Marine Mammal Medicine, eds: Dierauf and Gulland
Copper hasn't been implicated as a potential toxin in marine mammals
O'Shea study of manatees - discounted b/c problems found in feeding areas where copper
pesticides had been intensively applied

John Calimbokitis - Cascadia Research Personal Communication July 18, 2002 360-943-7325

Not as high concern with copper and cyanide

More concern with anthropogenic sources

For naturally occurring chemicals, marine mammals may have developed a way to deal with the chemicals

For "new" anthropogenic chemicals (i.e. mercury, DDT, etc) they may have not developed a way to process and excrete these chemicals

He has never seen or heard of copper being a problem for marine mammals [b/c no research?]